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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/955,956	09/20/2001	Nirisoa Collin	Q66244	9982

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EXAMINER

TRAN, NGHI V

ART UNIT	PAPER NUMBER
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2151

DATE MAILED: 03/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/955,956	Applicant(s) COLLIN ET AL.	
	Examiner Nghi V Tran	Art Unit 2151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) 6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-6 are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02/19/2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>02/19/02</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-5, drawn to a method of managing protection resources in a communications network, enabling allocation of protection resources to active resources and including in particular a step of establishing a resource organization or information model made up of protection groups or selectors controlling switching between active resources and protection resources, by means of terminals or connection points, characterized in that said organization or information model includes groups comprising or using protection resources associated with a specific flow direction, classified in class 709, subclass 233.
 - II. Claim 6, drawn to a telecommunications network, in particular a WDM transmission network, comprising active resources, handling transmission and call set-up and maintenance in normal operation, and additional protection resources, normally inactive and intended to supplant the active resources in the event of malfunction, classified in class 709, subclass 226.
2. The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case, the system as claimed can be practice by another materially different process such as a method of managing protection resources in a communication network without handling transmission and call set-up and maintenance in normal operation.

3. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with David Cushing on March 04, 2005 a provisional election was made with traverse to prosecute the invention of I, claims 1-5. Affirmation of this election must be made by applicant in replying to this Office action. Claim 5 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim

remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Specification

6. The disclosure is objected to because of the following informalities: "BRIEF DESCRIPTION OF THE DRAWING" is missing.

Appropriate correction is required.

Drawings

7. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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9. Claims 1-5 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claims 1-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Chang et al., U.S. Patent No. 6,226,111 (hereinafter Chang).

12. With respect to claim 1, Chang teaches a method of managing protection resources in a communications network (see abstract and figs.7-15), enabling allocation (i.e. self-healing) of protection resources to active resources and including in particular a step of:

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- establishing a resource organization or information model (col.11, Ins.20-25) made up of protection groups or selectors controlling switching (72 i.e. a cross-connect controller) between active resources (64 i.e. working) and protection resources (66 i.e. protection) (figs.7-8 and col.11, Ins.1-55),
- by means of terminals or connection points (60 or 62 i.e. switch), characterized in that said organization or information model includes groups comprising or using protection resources associated with a specific flow direction (col.11, Ins.1-19 i.e. “a specific flow direction” is interpreted as “counter-rotating directions”).

13. With respect to claim 2, Chang further teaches said resources each have a sending end and a receiving end (i.e. “sending end” is interpreted as “an output transmitting” and “a receiving end” is interpreted as “an input receiving”), characterized in that the organization or information model includes a dedicated unidirectional protection group at the receiving end (64 or 66) and a dedicated unidirectional protection group at the sending end (68 or 70), each of said unidirectional protection groups using differentiated protection resources (col.11, Ins.9-20 i.e. differentiated protection resources” is interpreted as “working fibers” and “protection fibers” of both rings 52₁ and 52₂) and commanding their use independently of each other (col.11, Ins.42-55 and col.14, Ins.12-15).

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14. With respect to claim 3, Chang further teaches characterized in that the two unidirectional protection groups each have specific and distinct characteristics and switching configurations (col.13, Ins.39-54 i.e. "specific and distinct characteristics" is interpreted as "in one direction the data needs to travel only a small portion of ring while in the second direction the data needs to traverse all the other nodes in the ring before reaching the desired node"), all the terminals or connection points of the dedicated protection group at the receiving end being receivers (64 or 66) and all the terminals or connection points of the dedicated protection group at the sending end being senders (68 or 70).

15. With respect to claim 4, Chang further teaches characterized in that each of the unidirectional dedicated protection groups (56₁ and 56₂ i.e. "protection path" is interpreted as "unidirectional dedicated protection groups") contains protection units and protected units (i.e. "protection units and protected units" is inherent because "protection units and protected units" must be included in the optical switch in order to perform a self-healing networks using Path Protection or redundant path (col.11, Ins.20-25)), each protection unit being connected to a reliable resource (56₁ and 56₂ i.e. "a reliable resource" is interpreted as "protection") and an unreliable resource (54₁ and 54₂ "an unreliable resource" is interpreted as "working").

16. With respect to claim 5, Chang further teaches characterized in that, in the case of bidirectional traffic (fig.12 and col.9, Ins.13-46 i.e. "bidirectional traffic" is interpreted

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as "bi-directional self-healing rings"), the organization or information model is made up of a unidirectional protection group for the receiving end (col.4, Ins.1-15 i.e. "receiving end" is interpreted as "add fibers" (102)), a unidirectional protection group for the sending or source end (col.4, Ins.1-15 i.e. "the sending end" is interpreted as "drop fibers" (104)), and a bidirectional protection group comprising the aforementioned two unidirectional protection groups (col.13, Ins.55 - col.14, In.62).

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. "Method and apparatus for transparent optical communication with two-fiber bidirectional ring with autoprotection and management of low priority traffic," by Arecco, U.S. Patent No. 6,400,476.

b. "Optical network," by Ikeda et al., U.S. Patent No. 6,643,041.

c. "Optical wavelength-division multiplex transmission equipment with a ring structure," by Asahi, U.S. Patent No. 6,023,359.

d. "Network autodiscovery in an all-optical network," by deVette, U.S. Patent No. 6,718,141.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nghi V Tran whose telephone number is (571) 272-4067. The examiner can normally be reached on Monday-Friday.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on (571) 272-3939. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nghi V Tran
Patent Examiner
Art Unit 2151

NT


ZARNI MAUNG
SUPERVISORY PATENT EXAMINER